EXECUTIVE SUMMARY

INTRODUCTION

On January 7, 2013, Transcontinental Gas Pipeline Company (Transco) filed an application with the Federal Energy Regulatory Commission (FERC or Commission) in Docket Number CP13-36-000 for the proposed Rockaway Delivery Lateral Project (Rockaway Project) under Section 7(c) of the Natural Gas Act (NGA), as amended, and Parts 157 and 284 of the Commission's regulations. The application was noticed in the Federal Register on January 29, 2013. Transco is seeking a Certificate of Public Convenience and Necessity (Certificate) from the Commission for the Rockaway Project to construct and operate a new natural gas transmission pipeline and associated facilities in Queens and Kings Counties, New York.

On April 9, 2013, Transco filed an application with the FERC in Docket Number CP13-132-000 for the proposed Northeast Connector Project under Section 7(c) of the NGA, as amended, and the above-referenced regulations. This application was noticed in the Federal Register on April 24, 2013. Transco is seeking a Certificate from the Commission for the Northeast Connector Project to modify existing compressor station facilities along its existing pipeline system in York County, Pennsylvania and Mercer and Middlesex Counties, New Jersey. The Northeast Connector Project would not be necessary and would not be implemented if not for the Rockaway Project; therefore, environmental review of the two projects is being considered jointly in a single document.

We[1] prepared this draft Environmental Impact Statement (EIS) to assess the environmental impacts associated with construction and operation of the Rockaway and Northeast Connector Projects (Projects) as required under the National Environmental Policy Act (NEPA) of 1969, as amended. The FERC is the lead agency for the preparation of the draft EIS. The U.S. Department of the Interior, National Park Service (NPS); U.S. Environmental Protection Agency (EPA); U.S. Army Corps of Engineers (USACE), New York District; National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NOAA Fisheries); and City of New York are participating in the NEPA review as cooperating agencies.[2] The purpose of this draft EIS is to inform the public and permitting agencies about the proposed facilities and the potential adverse and beneficial environmental impacts of the Projects and their alternatives, and recommend mitigation measures that would avoid or reduce adverse impacts.

PROPOSED ACTION

The Rockaway Project would consist of two components: a 26-inch-diameter natural gas pipeline (the Rockaway Delivery Lateral) and associated facilities, and a metering and regulating (M&R) facility with associated piping and equipment. The new pipeline would extend approximately 3.2 miles from an offshore interconnect with Transco's existing 26-inch-diameter Lower New York Bay Lateral (LNYBL) in the Atlantic Ocean, to an onshore delivery point at an interconnection with National Grid's pipeline system on the Rockaway Peninsula in Queens County, New York.[3] The new pipeline would connect to the LNYBL via a subsea hot-tap and manifold. A portion of the new pipeline would be constructed on

[1] "We," "us," and "our" refer to the environmental staff of the Federal Energy Regulatory Commission's Office of Energy Projects.

[2] A cooperating agency is an agency that has jurisdiction over all or part of a project area and must make a decision on a project, and/or an agency that provides special expertise with regard to environmental or other resources.

[3] The Rockaway Project would provide an additional delivery point to National Grid's local distribution companies, Brooklyn Union Gas Company (doing business as National Grid NY) and KeySpan Gas East Corporation, collectively referred to as National Grid.

federal land (both onshore and offshore) within the Gateway National Recreation Area (GNRA), which is managed by the NPS. The remainder would be built on submerged lands owned by New York State and on land owned by the Triborough Bridge and Tunnel Authority.

The M&R facility would include meters and regulators, heating units, inlet and outlet piping, and aboveground launcher and receiver units for inserting and removing internal inspection tools. The facility would be built within a historic airplane hangar complex on federal land within the GNRA in Kings County, New York.

For the Northeast Connector Project, Transco proposes to add incremental compression at its existing Compressor Station 195 in York County, Pennsylvania; Compressor Station 205 in Mercer County, New Jersey; and Compressor Station 207 in Middlesex County, New Jersey. Transco would replace three existing natural gas-fired reciprocating engines with two new electric motor drives at Compressor Station 195, and uprate existing electric-driven motors at Compressor Stations 205 and 207. These modifications would occur on lands owned by Transco within the existing compressor station sites. The modifications to the compressor stations would result in the net addition of 16,940 horsepower of compression on Transco's existing system.

Transco's objectives for the Projects are to enhance the reliability and flexibility of National Grid's distribution system in New York City and to provide a new incremental (i.e., additional) supply of natural gas. Dependent upon Commission and other approvals, Transco would begin construction of the Projects during the spring of 2014.

AGENCY AND PUBLIC REVIEW AND COMMENT OPPORTUNITIES

On March 13, 2009, Transco filed a request with the FERC to implement the Commission's pre-filing process for the Rockaway Project. On March 26, 2009, we granted Transco's request and established a pre-filing Docket Number (PF09-8-000) in which to place information filed by Transco, comments provided by stakeholders, and documents issued by the FERC and other agencies into the public record.

On May 25, 2012, we issued a *Notice of Intent to Prepare an Environmental Impact Statement for the Planned Rockaway Delivery Lateral Project, Request for Comments on Environmental Issues, and Notice of Public Scoping Meetings* (NOI), which was mailed to stakeholders. The NOI described our environmental review process; provided a preliminary list of environmental issues for review in the draft EIS; requested written comments from the public on the scope of the draft EIS; announced the time and location of public scoping meetings; and invited other agencies to participate as cooperating agencies in the preparation of the EIS. We received verbal comments from 11 individuals at the scoping meetings and 120 comment letters from stakeholders to the Rockaway Project.

On April 26, 2013, we issued a *Notice of Intent to Prepare an Environmental Impact Statement for the Proposed Northeast Connector Project and Request for Comments on Environmental Issues*, which was mailed to stakeholders. The NOI described the relationship between the Projects; described the FERC's environmental review process; provided a preliminary list of issues for review in the draft EIS; requested written comments from the public on the scope of the draft EIS; and invited other agencies to participate as cooperating agencies in the preparation of the EIS. We received four written comment letters in response to the NOI for the Northeast Connector Project.

All substantive comments submitted to the FERC via scoping meetings, interagency coordination meetings, and letters, are addressed in this draft EIS. In addition, cooperating agencies (NPS, EPA, USACE, NOAA Fisheries, and City of New York) provided us with comments, which have been incorporated into this document.

ENVIRONMENTAL IMPACTS AND MITIGATION

We evaluated the impacts of the Projects on geology, soils, groundwater, surface waters, wetlands, vegetation, wildlife and aquatic resources, fisheries, special status species, land use and visual resources, socioeconomics (including transportation and traffic), cultural resources, air quality and noise, and reliability and safety. We also considered the cumulative impacts of the Projects with past, current, and reasonably foreseeable future actions in the project areas.

Significant issues identified as a result of our analyses include the following: impacts on marine wildlife and Essential Fish Habitat (EFH) due to pile driving and other effects associated with offshore construction; impacts on special status species, including marine mammals; impacts on cultural resource sites, particularly the historic airplane hangar complex that would house the M&R facility; cumulative impacts; and air quality and noise impacts. Where necessary, we are recommending additional mitigation measures to minimize or avoid these and other impacts. Section 5.0 of the EIS contains our conclusions and a compilation of our recommended mitigation measures.

Noise Impacts on Marine Wildlife

Impacts on marine wildlife could result from construction noise due to offshore pile driving, which would be used to stabilize construction vessels and the pipeline for a horizontal directional drill (HDD) crossing of the shoreline. Noise due to pile driving would exceed the injury threshold for fish in areas immediately adjacent to piles. Similarly, noise due to pile driving would exceed behavioral disturbance thresholds for sea turtles and fish in areas immediately adjacent to piles. Noise from pile driving would exceed the behavioral disturbance threshold for marine mammals in the area extending up to 2.86 miles from the piles, but Transco would monitor the area for impacts on marine mammals. The noise from pile driving would be short term and intermittent, and impacts on species would be avoided or mitigated by the use of soft-start procedures (i.e., by gradually increasing power to the pile driver), which would allow species to move away from the area before noise levels exceed the injury or behavioral disturbance thresholds.

Impacts on Fisheries, Essential Fish Habitat, and Benthic Species

The offshore segment of Transco's proposed pipeline is located in a marine area that supports EFH for 21 species and both diadramous and marine fisheries. In addition to noise impacts on fish as discussed above, offshore excavations would create turbidity plumes in the water column that could clog fish gills, obscure visual stimuli, and reduce food intake for benthic filter feeders. Some demersal fish that are adapted to higher turbidity environments could be drawn to the excavation activities, but most juvenile and adult pelagic fish would likely swim away. Approximately 402 acres of seabed could be affected by sedimentation, which could have an impact on bivalves and other benthic organisms. Benthic species are expected to recover within 2 years.

Transco has identified a number of mitigation measures that would avoid or minimize impacts on EFH and fisheries resources during construction. Transco would use the HDD method to install the pipeline across the shoreline, which would avoid direct impacts on the seafloor within 0.65 mile of the shore. Additionally, Transco would use mid-line buoys to minimize cable sweep impacts on the seafloor associated with anchoring of construction vessels. Transco would also minimize impacts on fish species

and EFH through implementation of its mitigation plans, including a *Horizontal Directional Drill Monitoring and Contingency Plan*; *Spill Prevention, Control, and Countermeasures Plan*; and *Construction Spill Plans for Oil and Hazardous Materials*.

Transco initially proposed to allow offshore excavation areas to infill by natural sedimentation processes. In response to comments from cooperating and other agencies regarding impacts on marine species due to an open trench, Transco modified the proposed action to active backfill. Transco would configure the jet sled used to excavate the offshore pipe trench to discharge sediment back into the trench as the pipeline is lowered beneath the seafloor. Following installation of the pipeline, Transco would conduct a bathymetric survey to document seafloor elevations along the pipe trench as well as other offshore excavation areas. If the survey identifies any areas where the seafloor has not been restored and/or where 4 feet of cover is not present over the pipeline, Transco would backfill these areas using sediments obtained from the seafloor with a suction dredge. Transco also would add a top layer of native sediments over the drilling fluid and cuttings that collect within the offshore HDD exit pit.

Impacts on Sensitive Species and Marine Mammals

To comply with Section 7 of the Endangered Species Act (ESA), we consulted with the U.S. Fish and Wildlife Service (FWS) and NOAA Fisheries regarding the presence of federally listed species in the areas that would be affected by the Projects. Based on these consultations and our own analyses, we determined that construction and operation of the Rockaway Project would have *no effect* on fin whale, humpback whale, and shortnose sturgeon; *may affect, but would not likely adversely affect* leatherback sea turtle, Kemp's ridley sea turtle, green sea turtle, loggerhead sea turtle, roseate tern, piping plover, and Seabeach amaranth; and *may affect, and is likely to adversely affect* right whale and Atlantic sturgeon. Transco maintains agreements with the FWS that exempt modifications of existing Transco facilities, such as compressor stations, from further review for impacts on federally listed species. Based on these agreements and additional correspondence with the FWS, we determined that the Northeast Connector Project *may affect, but is not likely to adversely affect* Indiana bat and would have *no effect* on bog turtle and swamp pink.

We are requesting that the FWS and NOAA Fisheries consider this draft EIS as the Biological Assessment for the Rockaway Project. We are also recommending that Transco not begin construction activities with the Rockaway Project until we complete our consultations with the FWS and NOAA Fisheries. No further consultations with the FWS are required for the Northeast Connector Project.

Transco submitted an application to NOAA Fisheries for an Incidental Harassment Authorization for Level B harassment of six marine mammal species[4] that could be present in the offshore workspace at the time of construction. As part of its application, Transco proposed several mitigation/monitoring procedures to minimize impacts on marine mammals resulting from operation of a vibratory hammer for pile driving and/or from vessel collisions. We have reviewed Transco's proposed mitigation measures, but we have not completed our consultations with NOAA Fisheries regarding impacts on marine mammal species. Therefore, we are recommending that Transco not begin offshore construction activities until the FERC staff receives comments from NOAA Fisheries and an Incidental Harassment Authorization is issued to Transco.

[4] Marine mammals are protected species under the Marine Mammal Protection Act.

Impacts on Cultural Resource Sites

The proposed M&R facility would be constructed within a hangar complex on Floyd Bennett Field, which is listed as a district on the National Register of Historic Places. Transco prepared a Historic Structures Report for the hangars to serve as a planning tool for the proposed rehabilitation and conducted a study to assess the effects of vibration on the hangars. Transco prepared initial schematic drawings for the rehabilitation, which have been reviewed by the NPS and New York State Historic Preservation Office (SHPO). Transco filed a Schematic Design Submittal and comments from the New York SHPO on the Submittal in July 2013. The SHPO commented that the proposed rehabilitation of the hangars appears to meet the Secretary of the Interior's *Standards for the Treatment of Historic Properties* (36 Code of Federal Regulations [CFR] 68). Transco expects to submit full design and construction documents for the M&R facility to the FERC, NPS, and New York SHPO in 2013. We will make a Determination of Effect on the M&R facility after all necessary reports and studies have been filed with the Commission and consultation is complete, or we will negotiate a Programmatic Agreement with the Advisory Council on Historic Preservation regarding impacts on the site.

To ensure that our responsibilities under Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations are met, we are recommending that Transco not begin construction until all outstanding survey and evaluation reports, design and construction drawings for Hangars 1 and 2, a Construction Protection Plan (for vibration monitoring), and any necessary treatment plans have been reviewed by the appropriate parties; the Advisory Council on Historic Preservation is provided an opportunity to comment if historic properties would be affected or a Programmatic Agreement has been executed; and we provide written notification to proceed.

Air Quality and Noise Impacts

Air quality impacts associated with construction of the Projects would include emissions from fossil-fueled construction equipment and fugitive dust. Such air quality impacts would generally be temporary and localized and would not cause or contribute to a violation of applicable air quality standards. The majority of new emissions associated with the Projects would occur during operation and would result from the operation of four natural gas-fired heating units and an emergency generator at the M&R facility. While no new compressor facilities would be required, modifications/upgrades are proposed at Compressor Stations 195, 205, and 207. At Compressor Station 195, Transco proposes to replace three existing gas-fired reciprocating engines with two new electric motor drives, which would result in a decrease in operating emissions at this site. The modifications at Compressor Stations 205 and 207 would not result in an increase in operating emissions at these sites.

Operation of the Rockaway Delivery Lateral is not expected to generate significant noise levels. Noise attributable to operation of the M&R facility is estimated to be lower than 55 decibels on the A-weighted scale at nearby noise sensitive areas and the change in ambient noise conditions would likely be undetectable to the human ear. The proposed modifications at Compressor Station 195 are expected to result in a slight decrease in ambient noise in the vicinity of this site, whereas the modifications at Compressor Stations 205 and 207 would result in slight increases in noise levels. To ensure that noise due to operations of the compressor stations is consistent with existing ambient conditions and/or does not exceed our requirements, we are recommending that Transco provide noise surveys for each site to document noise levels at full load conditions. If the noise levels at the stations exceeds our standards, Transco would be required to identify and implement additional mitigation measures.

Cumulative Impacts

In conjunction with the Rockaway Project, National Grid is constructing a new interconnecting pipeline and associated facilities, referred to as the Brooklyn-Queens Interconnect Project, between the proposed Rockaway Delivery Lateral and M&R facility. This project is not subject to the jurisdiction of the Commission, but is considered in our assessment of cumulative environmental impacts. Additionally, a number of other planned projects are proposed in the same regions and could potentially be constructed within the same general timeframe as the Projects. As a result, there is a potential for the Projects to contribute to cumulative impacts.

Detailed descriptions of environmental impacts, including a description of cumulative impacts, Transco's proposed mitigation measures, and our recommendations to further minimize and mitigate impacts are provided in Sections 2.0, 3.0, 4.0, and 5.0 of the draft EIS.

ALTERNATIVES CONSIDERED

We evaluated the No Action Alternative, energy alternatives, system alternatives, route alternatives for the proposed pipeline, site alternatives for the M&R facility, and alternatives to the Northeast Connector Project.

Both the No Action Alternative and energy alternatives would eliminate or delay the short- and long-term environmental impacts identified in this EIS, but the objectives of the proposed Projects would not be met. Our analysis of system alternatives included an evaluation of existing and proposed natural gas pipelines or that currently or eventually would serve the markets targeted by the Projects. None of the existing or proposed systems or facilities provide a new connection with National Grid's system on the Rockaway Peninsula. New pipeline construction, ranging from 10 to 40 miles in length, would be required for these systems to service the Rockaway Peninsula, which would result in greater environmental impacts than the Projects.

We evaluated four route alternatives to Transco's proposed route for the Rockaway Delivery Lateral, five alternative sites for the M&R facility, and alternatives to the Northeast Connector Project. Because none of these alternatives would offer significant environmental advantages over the proposed facilities, we eliminated them from further consideration.

For all these reasons, we have determined that the Projects, as modified by our recommended mitigation measures, are the preferable to any of the alternatives evaluated.

CONCLUSIONS

We determined that construction and operation of the Projects would result in limited adverse environmental impacts that would mostly occur during construction. This determination is based on a review of the information provided by Transco and further developed from data requests; field investigations; scoping; literature research; alternatives analyses; and contacts with federal, state, and local agencies, Native American tribes, and individual members of the public. We conclude that the approval of the Projects would have some adverse environmental impacts, but these impacts would be reduced to less-than-significant levels. Although many factors were considered in this determination, the principal reasons are:

- Transco would obtain all required federal authorizations prior to beginning construction;

- Transco would implement its *Project-Specific Erosion Control, Revegetation, and Maintenance Plan* for the Rockaway Project, the FERC's *Upland Erosion Control, Revegetation, and Maintenance Plan* for the Northeast Connector Project, and other project-specific construction, restoration, and mitigation plans that would avoid, minimize, or mitigate impacts on natural and cultural resources;

- Transco would utilize the HDD construction method to avoid direct impacts on sensitive habitats at the shoreline;

- Transco would reuse and rehabilitate the historic airplane hangar complex at Floyd Bennett Field for the M&R facility in accordance with a design to be approved by the FERC, NPS, and New York SHPO;

- the FERC would complete the process of complying with Section 7 of the ESA prior to construction;

- the FERC would complete the process of complying with Section 106 of the NHPA prior to construction; and

- an environmental inspection program would be implemented to ensure compliance with the mitigation measures that become conditions of the FERC Certificate.

In addition, we developed 27 site-specific mitigation measures that Transco should implement to further reduce the environmental impacts that would otherwise result from construction of the Projects. We are recommending that these mitigation measures be attached as conditions to any authorization issued by the Commission. These recommended mitigation measures are presented in Section 5.2 of the draft EIS.